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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/073,883 02/14/2002		Ian James Fitzgerald	4502-1002	6759		
466	7590	01/20/2004		EXAMINER		
YOUNG			SWENSON, BRIAN L			
745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			OR	ART UNIT	PAPER NUMBER	
				3618	3618	

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

						TV			
			Application	n No.	Applicant(s)	744			
> Office Action Summary			10/073,88	3	FITZGERALD, IAI	N JAMES			
			Examiner		Art Unit				
•			Brian Swe		3618				
Period fo	- Th MAILING DATE of this commu r Reply	ınication app	ears on th	cover she t with th c	orrespond nc ad	dress			
THE N - Exten after S - If the - If NO - Failur - Any re	DRTENED STATUTORY PERIOD MAILING DATE OF THIS COMMUI sions of time may be available under the provision of time may be available under the provision of the maximum that the provision of the period for reply is specified above, the maximum that the toreply within the set or extended period for reply preceived by the Office later than three monther displayment. See 37 CFR 1.704(b).	NICATION. ns of 37 CFR 1.13 nmunication. (30) days, a reply statutory period w bly will, by statute,	36(a). In no eve within the statu vill apply and will cause the appli	nt, however, may a reply be tim tory minimum of thirty (30) days I expire SIX (6) MONTHS from cation to become ABANDONEI	nely filed s will be considered timel the mailing date of this co D (35 U.S.C. § 133).				
1)🖂	Responsive to communication(s) f	iled on <u>10 No</u>	ovember 20	<u>003</u> .					
2a) <u></u> ☐	This action is FINAL.	2b) This	action is no	n-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)⊠	☑ Claim(s) <u>1-8</u> is/are pending in the application.								
	4a) Of the above claim(s) <u>5-8</u> is/are withdrawn from consideration.								
5)□	Claim(s) is/are allowed.								
6)🖂	Claim(s) <u>1-4</u> is/are rejected.		-						
7)	Claim(s) is/are objected to.								
· · · · · · · · · · · · · · · · · · ·	Claim(s) are subject to rest	riction and/or	r election re	equirement.					
Application	on Papers								
9)☐ The specification is objected to by the Examiner.									
10)🛛 -	oxtimes The drawing(s) filed on <u>14 February 2002</u> is/are: a) $oxtimes$ accepted or b) $oxtimes$ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	nder 35 U.S.C. §§ 119 and 120								
* S 13) \(\text{A} \) sii 37 a) 14) \(\text{A} \) re	Acknowledgment is made of a clai All b) Some * c) None of 1. Certified copies of the priorit 2. Certified copies of the priorit 3. Copies of the certified copie application from the Internat ee the attached detailed Office act cknowledgment is made of a claim nce a specific reference was included CFR 1.78. 1. The translation of the foreign I cknowledgment is made of a claim ference was included in the first se	ty documents by documents s of the prior tional Bureau tion for a list of for domestic led in the firs anguage pro-	s have been the have been the certiful of the	n received. n received in Application received in Application ts have been received 17.2(a)). Nied copies not received and 35 U.S.C. § 119(a) of the specification or plication has been received 35 U.S.C. §§ 120	on No ed in this National ed. e) (to a provisional in an Application eived. and/or 121 since	l application) Data Sheet. a specific			
Attachment	(s) e of References Cited (PTO-892)			4) Interview Summary	(PTO-413) Paper No.	e)			
2) Notice	e of References Cited (P10-892) e of Draftsperson's Patent Drawing Review nation Disclosure Statement(s) (PT0-1449)		·	5) Notice of Informal P 6) Other:					

DETAILED ACTION

1. Applicant's election of Figure 2 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). An action on the merits of claims 1-4 follows below.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in New Zealand on 15 February 2002. It is noted, however, that applicant has not filed a certified copy of the 50995 application as required by 35 U.S.C. 119(b).

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "7" has been used to designate both "the stub axle" and "the rotating hub" in Figure 1. The examiner suggests renumbering "the rotating hub" as element 8 for consistence with page 3, line 8 of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The second member (3) in the elected embodiment of Figure 2 is not capable of being secured to the first member so that it is rotatable relative to the first member (2) about an axis as claimed in claim 4. Claim 4 has been examined with the second member allowed to translate vertically relative to the first member, in accordance the description of Figure 2 found on page 4, lines 3-6.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear in line 3, claim 2 what "can move in a similar vertical position" is referring to. The examiner suggest –can move in a vertical position relative—.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 10/073,883

Art Unit: 3618

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,487,429 issued to Ruggles.

Ruggles in Figures 1-6 and respective portions of the specification teach of a steering and suspension system having a kingpin (28; Col. 2, line 56) capable of being fixed (the king pin is fixed within pod 18) relative to the vehicle chassis (10), and a shaft rotatable (39) about the kingpin axis that is capable of being attached to a steering system (52).

In regards to claims 2 and 3, as best understood Ruggles teaches of a component (38) capable of attachment to a wheel via a stub axle or other means (40), and also connectable to the rotatable shaft in such a manner that it can move in a vertical position (shock absorber 48; Col. 2, lines 6-8) relative to the kingpin axis, the stub axle being oriented substantially perpendicular to the longitudinal axis of the kingpin (Figure 2).

In regards to claim 4, as best understood Ruggles teaches of an independent steering-suspension system including a kingpin (28) capable of being fixed relative to a vehicle chassis (10), a first member (39) rotatable about the axis of the kingpin, a second member (38) capable of being secured to the first member so that it can translate relative to the first member and is also rotatable about the axis of the kingpin,

Application/Control Number: 10/073,883

Art Unit: 3618

a stub axle (40) capable of being secured to the second member, a third member (46) rotatable about the axis of the kingpin, whereby in use the independent steering-suspension system substantially eliminates toe and bump-steer.

7. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,047,981 issued to Burrows.

Burrows in Figures 1-4 and respective portions of the specification teach of a steering and suspension system having a kingpin (21) capable of being fixed relative to the vehicle chassis (20), and a shaft rotatable (31) about the kingpin axis that is capable of being attached to a steering system (24).

In regards to claims 2 and 3, as best understood Burrows teaches of a component (321) capable of attachment to a wheel via a stub axle or other means (axle 221 is received within bore 322 of component 321), and also connectable to the rotatable shaft in such a manner that it can move in a vertical position (shock absorber 30; Col. 2, lines 6-8) relative to the kingpin axis, the stub axle being oriented substantially perpendicular to the longitudinal axis of the kingpin (Figure 4).

In regards to claim 4, as best understood Burrows teaches of an independent steering-suspension system including a kingpin (21) capable of being fixed relative to a vehicle chassis (20), a first member (31) rotatable about the axis of the kingpin, a second member (32) capable of being secured to the first member so that it can translate relative to the first member and is also rotatable about the axis of the kingpin, a stub axle (221) capable of being secured to the second member, a third member (40)

rotatable about the axis of the kingpin, whereby in use the independent steeringsuspension system substantially eliminates toe and bump-steer.

Page 6

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent No. 5,797,618 issued to Brokhole, U.S. Patent No. 4,648,623 issued to Cameron and U.S. Patent No. 3,630,303 issued to Froumajou teach of suspension systems with steering members.
- U.S. Patent No. 5,372,377 issued to Lee teaches of steerable front wheel suspension.
- U.S. Patent No. 6,357,770 issued to Carpiaux et al. teach of an in-wheel suspension system.
- U.S. Patent No. 5,209,319 issued to Buell, U.S. Patent No. 4,180,280 issued to Doveri, U.S. Patent No. 6,152,472 issued to Woodside, U.S. Patent No. 6,485,043 issued to Ito et al. all teach of various steering and suspension systems for cycle style vehicles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Swenson whose telephone number is (703) 305-8163. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Art Unit: 3618

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Brian Swenson Examiner Art Unit 3618